

**From:** [Kady, Thomas](#)  
**To:** [Coltrain, Katrina](#)  
**Cc:** [Todd Downham](#); [Amy.Brittain@deq.ok.gov](mailto:Amy.Brittain@deq.ok.gov); [Prince, George](#); [Powell, Greg](#)  
**Subject:** Re: Wilcox Call -- Purpose, DQOs, SOW, Schedule  
**Date:** Monday, May 18, 2015 6:58:56 PM

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Katrina -

My initial thoughts were handheld XRF for metals and assay kits for pH, PAHs and TPH. A GeoProbe would be handy to get some cores so we can get some depth profiles and install piezometers to understand the direction of groundwater flow and whether or not we have free product anywhere. Beyond that, I was planning to rely on existing information as well as the information that you generate from your current sampling effort. I'm open to alternate suggestions; those were just my initial thoughts.

Tom

Purpose:

FY15 -- Deploy rapid screening and direct sensing methodologies at the former Wilcox/Lorraine refinery operations facility and the former Wilcox tank farm area to gain an understanding of geology, hydrology, and nature and extent of contamination.

FY16 -- This information will be used to develop a more comprehensive RI/FS, but one that is focused on determining appropriate remediation technologies and their cost/technical effectiveness.

Data Quality Objectives:

Questions we need to answer include:

- What is the bedrock topography?
  - Are direct-push, direct-sensing technologies viable in this area?
  - Does the bedrock topography create preferential pathways?
- What subsurface structures and utilities exist?
  - Foundations?
  - Piping?
  - USTs?
  - Other?
- What array of COCs are likely at the refinery operations? In the northern tank farm area? In the easter tank farm area?
- What rapid screening and direct sensing techniques are viable, given the answers to question above?

Scope of Work:

## 1. Refinery operations area

- Clear/grub major perimeter paths around the various operational units
- Perform subsurface utility markout of perimeters for suspected foundations, pipes, utilities, USTs, etc.
  - GPR
  - Magnetometry
- Determine depth of overburden (depth to bedrock surface)
- Screen soils for pH, metals, PAHs, TPH
- Determine and perform viable direct-sensing techniques
- Perform data visualization of subsurface geology and COC distribution

## 2. Tank farm areas

- Clear seismic/resistivity lines throughout tank farm areas
- Perform geophysical testing
  - GPR
  - Seismic
  - Resistivity
- Map bedrock topography
- Screen soils for pH, metals, PAHs, TPH
- Determine appropriate direct-sensing technologies, given the geology and preferential pathways
- Perform direct-sensing investigation
- Perform data visualization of subsurface geology and COC distribution

### Schedule:

May/early June: PO to ERT from R6

June: Scoping/QAPP/Subcontractor bids (ERT/SERAS)

Late June / early July: Clearing (R6/ODEQ)

mid-July: Geophysical survey and soil screening

August: Bid/award direct sensing work

September: Perform direct sensing work and real-time data visualization

October: Refine data visualization and preliminary conceptual site model (CSM)

Sent from my iPhone

On May 18, 2015, at 6:23 PM, Coltrain, Katrina <[coltrain.katrina@epa.gov](mailto:coltrain.katrina@epa.gov)> wrote:

Tom, at this time I have only one question, and that relates to the COPC screening. I'm wondering how involved this screening will be. Will this be an extensive sampling event or are we to focus on specific areas? Perhaps, supplementing the SA/ESI data? I think we have some good data from the previous studies that can tell us what COPCs we expect to find. Will this screening use a mobile lab or field assay kits?

Also, the tank farm area extends further than the open field we walked through. We are sampling two properties that historically had tanks in the 'front' and 'side' yards. Depending on the strategic placement of the 5 aliquot locations, we may

not find 'waste' at depth. If not, I still want to screen these areas to be certain. In addition, these same two properties had tanks in areas located on the back of their properties, and we will want to screen these areas too. This logic also applies to the two 'tank' areas on the far east of the property across the eastern drainage where we are not certain whether tanks were ever put there or not. I want to be able to screen these out as areas of concern.

Todd, we need to work on getting updated access agreements for White and we need to get access from Spencer, Bell Trust, Henson, and Falcon. I have asked Lance to get me the contact info.

Katrina Higgins-Coltrain  
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US EPA Region 6  
LA/OK/NM Section  
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**From:** Kady, Thomas  
**Sent:** Monday, May 18, 2015 11:25 AM  
**To:** Coltrain, Katrina; Todd Downham; [Amy.Brittain@deg.ok.gov](mailto:Amy.Brittain@deg.ok.gov)  
**Cc:** Prince, George; Powell, Greg  
**Subject:** Wilcox Call -- Purpose, DQOs, SOW, Schedule

George/Greg - if you can, join us on a 2 o'clock call this afternoon to discuss Wilcox. If you're unavailable I'll get you up to speed later. Call in number is (b) (6) (b) (6). Pass code is (b) (6). We're planning on a half-hour call.

Katrina, Todd, and Amy – i've compiled my thoughts below. Let's discuss what you think.

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